

WHAT IS CLAIMED IS:

1 1. In a network comprising a plurality of computers, a computer-
2 implemented method of providing information in response to an information request, the
3 method comprising:

4 providing a first set of rules identifying a plurality of tokens and
5 information associated with the plurality of tokens;
6 receiving the information request from a first source, the information
7 request generated in response to an action performed by the user;
8 determining a first set of tokens from the plurality of tokens corresponding
9 to the information request;
10 determining first information corresponding to the first set of tokens based
11 upon the first set of rules; and
12 communicating the first information to the first source.

1 2. The method of claim 1 wherein the action performed by the user
2 comprises accessing a first web page and the information request comprises content
3 information displayed by the first web page.

1 3. The method of claim 1 wherein:
2 the action performed by the user comprises requesting purchase of a
3 plurality of items;
4 the information request comprises information identifying the plurality of
5 items; and
6 the first information comprises information related to purchasable items
7 corresponding to the plurality of items.

1 4. The method of claim 1 wherein the first source is a first computer,
2 and the method further comprises outputting the first information to the user via the first
3 computer.

1 5. The method of claim 1 wherein:
2 the information request comprises content information related to a
3 plurality of items,
4 determining the first set of tokens from the plurality of tokens
5 corresponding to the information request comprises:

6 extracting keywords related to the plurality of items from the
7 content information;
8 determining the first set of tokens corresponding to the keywords;
9 and
10 the first information comprises information related to purchasable items
11 corresponding to the plurality of items.

1 6. The method of claim 5 wherein the first information comprises
2 promotional information, branding information, and marketing information provided by a
3 plurality of vendors for the first set of tokens.

1 7. The method of claim 5 wherein extracting the keywords related to
2 the plurality of items from the content information comprises extracting a quantity value
3 associated with at least one keyword extracted from the content information.

1 8. The method of claim 7 wherein extracting the keywords related to
2 the plurality of items from the content information comprises extracting a unit of measure
3 associated with the quantity value.

1 9. The method of claim 1 wherein determining the first set of tokens
2 from the plurality of tokens corresponding to the information request comprises:
3 extracting a first plurality of keywords from the information
4 request; and
5 determining the first set of tokens corresponding to the first
6 plurality of keywords.

1 10. The method of claim 9 wherein:
2 extracting the first plurality of keywords from the information request
3 comprises:
4 storing a list of keywords; and
5 identifying a keyword as belonging to the first plurality of
6 keywords if the keyword is included in the information request and in the list of
7 keywords; and
8 determining the first set of tokens corresponding to the first plurality of
9 keywords comprises:

10 storing a second set of rules identifying tokens from the plurality of
11 tokens corresponding to keywords in the list of keywords; and
12 determining the first set of tokens corresponding to the first
13 plurality of keywords based upon the second set of rules.

1 11. The method of claim 10 wherein:
2 the list of keywords includes keywords specified by a plurality of vendors;
3 and
4 the second set of rules includes rules specified by the plurality of vendors.

1 12. The method of claim 1 wherein:
2 the first set of rules includes a first rule specifying a first condition
3 involving a category associated with at least one token from the plurality of tokens and
4 identifying information to be communicated to the user if the first condition is satisfied;
5 and

6 determining the first information corresponding to the first set of tokens
7 based upon the first set of rules comprises:

8 determining if the first condition of the first rule is satisfied by
9 tokens in the first set of tokens; and

10 if the first condition is satisfied, including the information
11 identified by the first rule in the first information.

1 13. The method of claim 1 wherein the first set of rules include rules
2 configured by a plurality of vendors and the information associated with the plurality of
3 tokens comprises vendor-configured information.

1 14. The method of claim 1 wherein determining the first information
2 corresponding to the first set of tokens based upon the first set of rules comprises:

3 determining a second set of rules from the first plurality of rules, the
4 second set of rules including rules associated with the first set of tokens; and

5 determining the first information based on the second set of rules, the first
6 information comprising information specified by the second set of rules.

1 15. The method of claim 1 further comprising:
2 storing preferences for the user;

3 filtering the first information to include information which satisfies the
4 user preferences; and
5 wherein communicating the first information to the first source comprises
6 communicating the filtered first information to the first source.

1 16. The method of claim 1 wherein:
2 the first set of rules includes a first rule provided by a first vendor, the first
3 rule specifying a first condition involving at least one token from the plurality of tokens
4 and identifying information provided by the first vendor to be communicated to the user if
5 the first condition is satisfied; and
6 determining the first information corresponding to the first set of tokens
7 based upon the first set of rules comprises:
8 determining if the first condition of the first rule is satisfied by
9 tokens in the first set of tokens; and
10 if the first condition is satisfied, including the information provided
11 by the first vendor in the first information.

1 17. The method of claim 1 further comprising:
2 modifying the first set of rules by modifying the associations between the
3 plurality of tokens and information associated with the plurality of tokens; and
4 wherein determining the first information corresponding to the first set of
5 tokens based upon the first set of rules comprising determining the first information based
6 upon the modified first set of rules.

1 18. In a network comprising a plurality of computers, a computer-
2 implemented method of providing information in response to an information request, the
3 method comprising:
4 receiving the information request from a first source, the information
5 request generated in response to an action performed by the user;
6 determining a plurality of tokens corresponding to the information request;
7 determining a plurality of vendors corresponding to the plurality of tokens;
8 determining first information provided by the plurality of vendors
9 corresponding to the plurality of tokens; and
10 communicating the first information to the first source.

1 19. In a network comprising a plurality of computers, a computer-
2 implemented method of providing information in response to an information request, the
3 method comprising:

4 receiving the information request from a first computer system, the
5 information request generated in response to an action performed by the user;
6 determining a plurality of tokens corresponding to the information request;
7 determining a plurality of vendors corresponding to the plurality of tokens;
8 for each vendor from the plurality of vendors:
9 determining a set of tokens from the plurality of tokens associated
10 with the vendor;
11 communicating information related to the set of tokens to the
12 vendor; and
13 in response, receiving information from the vendor corresponding
14 to the set of tokens; and
15 communicating information received from the plurality of vendors to the
16 first computer system.

1 20. In a network comprising a first computer system and a second
2 computer system, a computer-implemented method of providing information in response
3 to an information request, the method comprising:

4 at the first-computer system:
5 generating the information request in response to a user action; and
6 communicating the information request to the second computer
7 system; and

8 at the second computer system:
9 receiving the information request from the first computer;
10 accessing a first set of rules identifying a plurality of tokens and
11 information associated with the plurality of tokens;
12 determining a first set of tokens from the plurality of tokens
13 corresponding to the information request;
14 determining first information corresponding to the first set of
15 tokens based upon the first set of rules; and
16 communicating the first information to the first computer system.

1 21. The method of claim 20 wherein:
2 generating the information request at the first computer in response to the
3 user action comprises:
4 accessing a first web page provided by the second computer
5 system, the first web page comprising an input field for inputting information; and
6 inputting information identifying a second web page in the input
7 field; and
8 determining the first set of tokens at the second computer system from the
9 plurality of tokens corresponding to the information request comprises:
10 determining at least one token in the first set of tokens based on
11 content information displayed by the second web page.

1 22. The method of claim 21 wherein the second web page is stored by
2 a third computer system.

1 23. The method of claim 20 wherein:
2 generating the information request at the first computer in response to the
3 user action comprises:
4 accessing a first web page provided by the second computer
5 system, the first web page comprising an input field for inputting information; and
6 inputting content information in the input field; and
7 determining the first set of tokens at the second computer system from the
8 plurality of tokens corresponding to the information request comprises:
9 determining at least one token in the first set of tokens based on the
10 content information input in the input field.

1 24. A system for providing information to a user comprising:
2 a communication network;
3 a first computer system coupled to the communication network; and
4 a second computer system coupled to the communication network;
5 wherein the second computer system is configured to:
6 store a first set of rules identifying a plurality of tokens and
7 information associated with the plurality of tokens;

8 receive an information request from the first computer system, the
9 information request generated in response to an action performed by the user using the
10 first computer system;

11 determine a first set of tokens from the plurality of tokens
12 corresponding to the information request;

13 determine first information corresponding to the first set of tokens
14 based upon the first set of rules; and

15 communicate the first information to the first computer system.

1 25. The system of claim 24 wherein the action performed by the user
2 using the first computer system comprises accessing a first web page and the information
3 request comprises content information displayed by the first web page.

1 26. The system of claim 24 wherein:
2 the action performed by the user comprises requesting purchase of a
3 plurality of items;
4 the information request comprises information identifying the plurality of
5 items; and
6 the first information comprises information related to purchasable items
7 corresponding to the plurality of items.

1 27. The system of claim 24 wherein the first computer system is
2 configured to receive the first information from the second computer system and to output
3 the first information.

1 28. The system of claim 24 wherein:
2 the information request comprises content information related to a
3 plurality of items,
4 in order to determine the first set of tokens from the plurality of tokens
5 corresponding to the information request, the second computer system is configured to:
6 extract keywords related to the plurality of items from the content
7 information;
8 determine the first set of tokens corresponding to the keywords;
9 and

10 the first information comprises information related to purchasable items
11 corresponding to the plurality of items.

1 29. The system of claim 28 wherein the first information comprises
2 promotional information, branding information, and marketing information provided by a
3 plurality of vendors for the first set of tokens.

1 30. The system of claim 28 wherein the second computer system is
2 configured to extract a quantity value associated with at least one keyword extracted from
3 the content information.

1 31. The system of claim 30 the second computer is configured to
2 extracting a unit of measure associated with the quantity value.

1 32. The system of claim 24 wherein the second computer system is
2 configured to determine the first set of tokens from the plurality of tokens corresponding
3 to the information request by:

4 extracting a first plurality of keywords from the information
5 request; and

6 determining the first set of tokens corresponding to the first
7 plurality of keywords.

1 33. The system of claim 32 wherein:
2 extracting the first plurality of keywords from the information request
3 comprises:

4 storing a list of keywords; and

5 identifying a keyword as belonging to the first plurality of
6 keywords if the keyword is included in the information request and in the list of
7 keywords; and

8 determining the first set of tokens corresponding to the first plurality of
9 keywords comprises:

10 storing a second set of rules identifying tokens from the plurality of
11 tokens corresponding to keywords in the list of keywords; and

12 determining the first set of tokens corresponding to the first
13 plurality of keywords based upon the second set of rules.

1 39. The system of claim 24 wherein:

2 the first set of rules includes a first rule provided by a first vendor, the first
3 rule specifying a first condition involving at least one token from the plurality of tokens
4 and identifying information provided by the first vendor to be communicated to the user if
5 the first condition is satisfied; and

6 in order to determine the first information corresponding to the first set of
7 tokens based upon the first set of rules, the second computer system is configured to:

8 determine if the first condition of the first rule is satisfied by tokens
9 in the first set of tokens; and

10 if the first condition is satisfied, include the information provided
11 by the first vendor in the first information.

1 40. The system of claim 24 wherein the first computer system is
2 further configured to:

3 modify the first set of rules by modifying the associations between the
4 plurality of tokens and information associated with the plurality of tokens; and
5 determine the first information based upon the modified first set of rules.

1 41. A system for providing information to a user comprising:

2 a communication network;

3 a first computer system coupled to the communication network; and

4 a second computer system coupled to the communication network;

5 wherein the second computer system is configured to:

6 receive an information request from a first computer system, the
7 information request generated in response to an action performed by the user using the
8 first computer system;

9 determine a plurality of tokens corresponding to the information
10 request;

11 determine a plurality of vendors corresponding to the plurality of
12 tokens;

13 determine first information provided by the plurality of vendors
14 corresponding to the plurality of tokens; and

15 communicate the first information to the first computer.

1 42. A system for providing information to a user comprising:
2 a communication network;
3 a first computer system coupled to the communication network; and
4 a second computer system coupled to the communication network;
5 wherein the second computer system is configured to:
6 receive an information request from the first computer system, the
7 information request generated in response to an action performed by the user;
8 determine a plurality of tokens corresponding to the information
9 request;
10 determine a plurality of vendors corresponding to the plurality of
11 tokens;
12 for each vendor from the plurality of vendors:
13 determine a set of tokens from the plurality of tokens
14 associated with the vendor;
15 communicate information related to the set of tokens to the
16 vendor; and
17 in response, receive information from the vendor
18 corresponding to the set of tokens; and
19 communicate information received from the plurality of vendors to the
20 first computer system.

1 43. A system for providing information to a user comprising:
2 a communication network;
3 a first computer system coupled to the communication network; and
4 a second computer system coupled to the communication network;
5 wherein the first computer system is configured to:
6 generate an information request in response to a user action; and
7 communicate the information request to the second computer; and
8 wherein the second computer system is configured to:
9 receive the information request from the first computer system;
10 access to a first set of rules identifying a plurality of tokens and
11 information associated with the plurality of tokens;

code for providing a first set of rules identifying a plurality of tokens and information associated with the plurality of tokens;

code for determining a first set of tokens from the plurality of tokens corresponding to the information request;

code for communicating the first information to the first source.

49. The computer program product of claim 47 wherein:
the action performed by the user comprises requesting purchase of a plurality of items;
the information request comprises information identifying the plurality of items; and
the first information comprises information related to purchasable items corresponding to the plurality of items.

51. The computer program product of claim 47 wherein:
the information request comprises content information related to a plurality of items,
the code for determining the first set of tokens from the plurality of tokens corresponding to the information request comprises:
code for extracting keywords related to the plurality of items from the content information;
code for determining the first set of tokens corresponding to the keywords; and

10 the first information comprises information related to purchasable items
11 corresponding to the plurality of items.

1 52. The computer program product of claim 51 wherein the first
2 information comprises promotional information, branding information, and marketing
3 information provided by a plurality of vendors for the first set of tokens.

1 53. The computer program product of claim 51 wherein the code for
2 extracting the keywords related to the plurality of items from the content information
3 comprises code for extracting a quantity value associated with at least one keyword
4 extracted from the content information.

1 54. The computer program product of claim 53 wherein the code for
2 extracting the keywords related to the plurality of items from the content information
3 comprises code for extracting a unit of measure associated with the quantity value.

1 55. The computer program product of claim 47 wherein the code for
2 determining the first set of tokens from the plurality of tokens corresponding to the
3 information request comprises:

4 code for extracting a first plurality of keywords from the
5 information request; and
6 code for determining the first set of tokens corresponding to the
7 first plurality of keywords.

1 56. The computer program product of claim 55 wherein:
2 the code for extracting the first plurality of keywords from the information
3 request comprises:

4 code for storing a list of keywords; and
5 code for identifying a keyword as belonging to the first plurality of
6 keywords if the keyword is included in the information request and in the list of
7 keywords; and

8 the code for determining the first set of tokens corresponding to the first
9 plurality of keywords comprises:

10 code for storing a second set of rules identifying tokens from the
11 plurality of tokens corresponding to keywords in the list of keywords; and

12 code for determining the first set of tokens corresponding to the
13 first plurality of keywords based upon the second set of rules.

1 57. The computer program product of claim 56 wherein:
2 the list of keywords includes keywords specified by a plurality of vendors;
3 and
4 the second set of rules includes rules specified by the plurality of vendors.

1 58. The computer program product of claim 47 wherein:
2 the first set of rules includes a first rule specifying a first condition
3 involving a category associated with at least one token from the plurality of tokens and
4 identifying information to be communicated to the user if the first condition is satisfied;
5 and
6 the code for determining the first information corresponding to the first set
7 of tokens based upon the first set of rules comprises:
8 code for determining if the first condition of the first rule is
9 satisfied by tokens in the first set of tokens; and
10 if the first condition is satisfied, code for including the information
11 identified by the first rule in the first information.

1 59. The computer program product of claim 47 wherein the first set of
2 rules include rules configured by a plurality of vendors and the information associated
3 with the plurality of tokens comprises information configured by a vendor.

1 60. The computer program product of claim 47 wherein the code for
2 determining the first information corresponding to the first set of tokens based upon the
3 first set of rules comprises:
4 code for determining a second set of rules from the first plurality of rules,
5 the second set of rules including rules associated with the first set of tokens; and
6 code for determining the first information based on the second set of rules,
7 the first information comprising information specified by the second set of rules.

1 61. The computer program product of claim 47 further comprising:
2 code for storing preferences for the user;
3 code for filtering the first information to include information which
4 satisfies the user preferences; and

5 wherein the code for communicating the first information to the first
6 source comprises code for communicating the filtered first information to the first source.

1 62. The computer program product of claim 47 wherein:
2 the first set of rules includes a first rule provided by a first vendor, the first
3 rule specifying a first condition involving at least one token from the plurality of tokens
4 and identifying information provided by the first vendor to be communicated to the user if
5 the first condition is satisfied; and
6 the code for determining the first information corresponding to the first set
7 of tokens based upon the first set of rules comprises:
8 code for determining if the first condition of the first rule is
9 satisfied by tokens in the first set of tokens; and
10 if the first condition is satisfied, code for including the information
11 provided by the first vendor in the first information.

1 63. The computer program product of claim 47 further comprising:
2 code for modifying the first set of rules by modifying the associations
3 between the plurality of tokens and information associated with the plurality of tokens;
4 and
5 wherein the code for determining the first information corresponding to the
6 first set of tokens based upon the first set of rules comprises code for determining the first
7 information based upon the modified first set of rules.

1 64. A computer program product stored on a computer-readable
2 storage medium for providing information in response to an information request, the
3 computer program product comprising:
4 code for receiving an information request from a first source, the
5 information request generated in response to an action performed by the user;
6 code for determining a plurality of tokens corresponding to the information
7 request;
8 code for determining a plurality of vendors corresponding to the plurality
9 of tokens;
10 code for determining first information provided by the plurality of vendors
11 corresponding to the plurality of tokens; and
12 code for communicating the first information to the first source.

1 65. A computer program product stored on a computer-readable
2 storage medium for providing information in response to an information request, the
3 computer program product comprising:
4 code for receiving the information request from a first computer system,
5 the information request generated in response to an action performed by the user;
6 code for determining a plurality of tokens corresponding to the information
7 request;
8 code for determining a plurality of vendors corresponding to the plurality
9 of tokens;
10 for each vendor from the plurality of vendors:
11 code for determining a set of tokens from the plurality of tokens
12 associated with the vendor;
13 code for communicating information related to the set of tokens to
14 the vendor; and
15 in response, code for receiving information from the vendor
16 corresponding to the set of tokens; and
17 code for communicating information received from the plurality of
18 vendors to the first computer system.